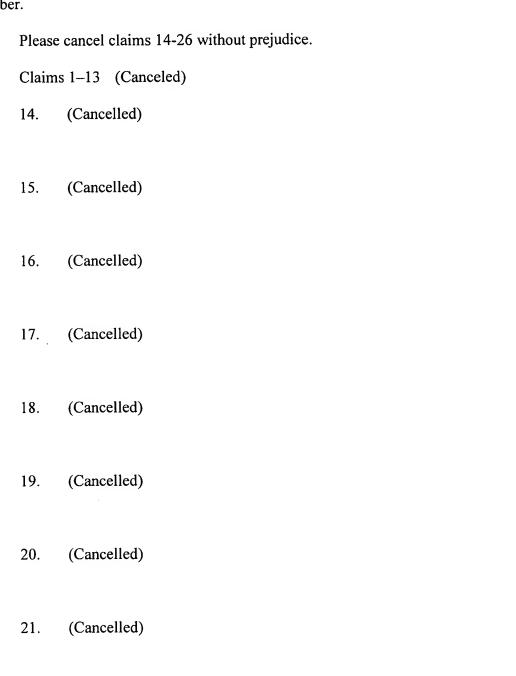
Amendments to the Claims:

(Cancelled)

22.

Please substitute the following clean copy text for the pending claims of the same number.



- 23. (Cancelled)
- 24. (Cancelled)
- 25. (Cancelled)
- 26. (Cancelled)
- 27. (Newly Added) A mold, comprising:
- a housing having an opening therein;

a shell capable of fitting within the opening of the housing, wherein the shell has a cavity therein capable of receiving a molding material; and

a resistive heater located between the housing and the shell, wherein the resistive heater has a geometry and material properties that define a predetermined power distribution.

- 28. (Newly Added) The mold of claim 27, wherein the predetermined power distribution results in uniform temperature distribution over an outer surface of the cavity.
- 29. (Newly Added) The mold of claim 28, wherein the uniform temperature distribution is provided even though power distribution in the resistive heater is unequal.

- 30. (Newly Added) The mold of claim 27, wherein the geometry of the resistive heater includes width of the resistive heater.
- 31. (Newly Added) The mold of claim 27, wherein the geometry of the resistive heater includes path length of the resistive heater.
- 32. (Newly Added) The mold of claim 27, wherein the geometry of the resistive heater includes thickness of the resistive heater.
- 33. (Newly Added) The mold of claim 27, wherein the geometry of the resistive heater includes spacial distribution of the resistive heater.
- 34. (Newly Added) The mold of claim 27, wherein the material properties of the resistive heater include resistivity of the resistive heater.
- 35. (Newly Added) The mold of claim 27, wherein the resistive heater is directly adhered to the outer surface of the shell.
- 36. (Newly Added) The mold of claim 27, wherein the resistive heater is not directly adhered to the outer surface of the shell.
- 37. (Newly Added) The mold of claim 27, further comprising a thermal barrier element disposed between the heater and the housing.

- 38. (Newly Added) The mold of claim 27, further comprising a cooling jacket.
- 39. (Newly Added) The mold of claim 27, wherein said resistive heater is coupled to a power supply, wherein application of current from said power supply results in production of heat by said resistive heater.
- 40. (Newly Added) The mold of claim 27, wherein the resistive heater further comprises a resistive coating and an electrically insulating element.
- 41. (Newly Added) The mold of claim 27, wherein further comprising one or more thermal sensors.
- 42. (Newly Added) The mold of claim 27, wherein the thermal sensors comprise an array of thermocouples.
- 43. (Newly Added) The mold of claim 27, further comprising one or more additional heaters.